IN THE CLAIMS:

The following listing of claims will replace all prior versions, and listings, of claims in the application.

1.   (Currently Amended)   A method for specifying a computer-implemented process, the method comprising:

displaying a graphical user interface comprising a plurality of possible steps that are useable in specifying at least a portion of a process;

receiving <u>first</u> user input selecting a plurality of steps specifying a first portion of the process;

creating a process specification in response to the <u>first</u> user input, wherein the process specification comprises [[a]] <u>the</u> plurality of steps specifying [[a]] <u>the</u> first portion of the process;

<u>receiving second user input selecting a plurality of nodes and interconnecting at least two of the plurality of nodes, thereby specifying a plurality of interconnected nodes;</u>

creating a block diagram in response to <u>the second</u> user input, wherein the block diagram specifies a second portion of the process<u>, wherein the second portion of the process is distinct from the first portion of the process, and wherein the block diagram is distinct from the process specification</u>;

wherein the block diagram comprises [[a]] <u>the</u> plurality of interconnected nodes which visually indicate operation of the second portion of the process;

wherein the process specification and the block diagram collectively specify the computer-implemented process.

2. (Original) The method of claim 1,

wherein the block diagram graphically specifies a procedure that uses values determined by the first portion of the process to produce one or more results.

3. (Original) The method of claim 1,

wherein the block diagram graphically specifies a decision operation based on execution results determined by steps in the process specification.

4. (Original) The method of claim 1, further comprising:

including one or more steps in the process specification operable to perform a plurality of operations based on a result computed by the block diagram.

5. (Original) The method of claim 1, further comprising:

including a step in the process specification that references the block diagram.

6. (Original) The method of claim 1, further comprising:

executing the process, wherein said executing comprises executing the process specification and executing the block diagram.

7. (Currently Amended) The method of claim 1, further comprising:

displaying a graphical user interface useable to create the block diagram;

~~receiving user input specifying the block diagram via the graphical user interface~~

<u>wherein said receiving the second user input comprises receiving the second user input via the graphical user interface</u>.

8. (Currently Amended) The method of claim 1,

wherein said creating the block diagram comprises:

displaying [[a]] <u>the</u> plurality of nodes in the <u>block</u> diagram, wherein one or more of the nodes are displayed in response to <u>the second</u> user input;

creating ~~interconnections among~~ <u>an interconnection between the at least two of</u> the plurality of nodes in response to <u>the second</u> user input.

9. (Currently Amended) The method of claim 1,

wherein said creating the block diagram in response to <u>the second</u> user input comprises creating a graphical program in response to <u>the second</u> user input.

3

10. (Currently Amended) The method of claim 1,

wherein the block diagram includes a first set of nodes having values determined by execution results of the process specification;

wherein said creating the block diagram comprises:

including a second set of function nodes in the block diagram in response to ~~the second~~ user input;

connecting nodes from the first set of nodes to nodes from the second set of function nodes, in response to the second user input.

11. (Currently Amended) The method of claim 1, wherein each of the plurality of steps in the process specification has one or more associated values, ~~the method further comprising:~~

wherein the first user input specifies ~~receiving user input specifying~~ at least a subset of the values associated with the plurality of steps;

the method further comprising:

automatically including one or more nodes in the block diagram, wherein each node corresponds to a value from the specified at least a subset of values.

12. (Currently Amended) The method of claim 1,

wherein the graphical user interface indicates operations that can be performed on an object;

wherein the first user input specifies one or more operations on the object;

wherein said creating the process specification is performed in response to the first user input received via the graphical user interface specifying one or more operations to be performed on the object.

13. (Original) The method of claim 12,

wherein the object is an image.

14. (Original) The method of claim 1, wherein the process specification comprises a script.

15. (Original) The method of claim 1, wherein the process specification is stored as a computer program.

16. (Currently Amended) The method of claim 1, ~~further comprising:~~

~~receiving user input specifying~~ <u>wherein the first user input specifies</u> a plurality of code modules;

wherein said creating the process specification comprises including a reference to each specified code module in the process specification.

17. (Currently Amended) The method of claim 1,

wherein said creating the process specification in response to <u>the first</u> user input comprises creating a program portion coded in a text-based programming language in response to <u>the first</u> user input.

18. (Original) The method of claim 1,

wherein process is executable to inspect a device;

wherein the block diagram is executable to determine an inspection classification for the device, depending on execution results of the process specification.

19. (Original) The method of claim 1,

wherein the process is a machine vision process executable to visually inspect a device;

wherein the block diagram is executable to determine an inspection classification for the device, depending on execution results of the process specification.

20. (Original) The method of claim 1,

wherein the process is executable to perform one or more of the following types of applications:

a machine vision application; an image processing application; an image analysis application; a motion control application; an industrial automation application; a process control application; a test and measurement application; a simulation application.

21. (Currently Amended) A method for specifying a computer-implemented process, the method comprising:

displaying a graphical user interface (GUI), wherein the GUI includes operations that are selectable to be included in a process specification;

receiving user first input to the GUI, wherein the first user input selects operations for inclusion in the process specification;

creating the process specification in response to the first user input, wherein the process specification specifies a first portion of the process;

receiving user second input to the GUI, wherein the second user input selects a plurality of nodes for inclusion in a block diagram and interconnects at least two of the nodes of the plurality of nodes;

creating [[a]] the block diagram in response to the second user input, wherein the block diagram specifies a second portion of the process;

wherein the process specification is distinct from the block diagram;

wherein the process specification and the block diagram collectively specify the computer-implemented process.

22. (Original) The method of claim 21,

wherein the block diagram graphically specifies a procedure that uses values determined by the first portion of the process to produce one or more results.

23. (Original) The method of claim 21,

wherein the block diagram graphically specifies a decision operation based on execution results determined by steps in the process specification.

24. (Original) The method of claim 21, further comprising:

including one or more steps in the process specification operable to perform a plurality of operations based on a result computed by the block diagram.

25. (Original) A method for specifying a computer-implemented process, the method comprising:

receiving user input indicating operations to be performed on an object;

storing a plurality of steps in a script in response to the user input, wherein each step is operable to perform an operation;

creating a block diagram in response to user input, wherein the block diagram specifies a decision operation based on execution results of the plurality of steps;

wherein the script and the diagram collectively specify the computer-implemented process.

26. (Currently Amended) A method for specifying a computer-implemented process, the method comprising:

creating a process specification in response to <u>first</u> user input, wherein the process specification comprises a plurality of steps specifying a first portion of the process;

creating a block diagram in response to <u>second</u> user input, wherein the block diagram specifies a second portion of the process;

wherein the block diagram comprises a plurality of interconnected nodes which visually indicate operation of the second portion of the process;

<u>wherein the process specification is distinct from the block diagram;</u>

wherein the process specification and the block diagram collectively specify the computer-implemented process.

27. (Currently Amended) A memory medium for specifying a computer-implemented process, the memory medium comprising program instructions executable to:

display a graphical user interface comprising a plurality of possible steps that are useable in specifying at least a portion of a process;

receive <u>first</u> user input selecting a plurality of steps specifying a first portion of the process;

create a process specification in response to the <u>first</u> user input, wherein the process specification comprises a plurality of steps specifying a first portion of the process;

<u>receive second user input selecting a plurality of nodes and interconnecting at least two of the plurality of nodes, thereby specifying a plurality of interconnected nodes;</u>

create a block diagram in response to <u>the second</u> user input, wherein the block diagram specifies a second portion of the process;

wherein the block diagram comprises [[a]] <u>the</u> plurality of interconnected nodes which visually indicate operation of the second portion of the process;

<u>wherein the process specification is distinct from the block diagram;</u>

wherein the process specification and the block diagram collectively specify the computer-implemented process.

28. (Original) The memory medium of claim 27,

wherein the block diagram graphically specifies a procedure that uses values determined by the first portion of the process to produce one or more results.

29. (Original) The memory medium of claim 27,

wherein the block diagram graphically specifies a decision operation based on execution results determined by steps in the process specification.

30. (Currently Amended) The memory medium of claim 27, <u>wherein the</u> ~~further comprising~~ program instructions <u>are further</u> executable to:

include one or more steps in the process specification operable to perform a plurality of operations based on a result computed by the block diagram.

31. (Currently Amended) The memory medium of claim 27,

wherein, in said creating the block diagram, ~~comprises~~ the program instructions are further executable to:

~~displaying~~ display a plurality of nodes in the diagram, wherein one or more of the nodes are displayed in response to the second user input;

~~creating interconnections among~~ create an interconnection between at least two of the plurality of nodes in response to the second user input.

32. (Currently Amended) The memory medium of claim 27,

wherein the graphical user interface indicates operations that can be performed on an object;

wherein the user input specifies one or more operations on the object;

wherein the program instructions are further executable to perform said creating the process specification ~~is performed~~ in response to the first user input received via the graphical user interface specifying one or more operations to be performed on the object.

33. (Original) The memory medium of claim 32,

wherein the object is an image.

34. (Original) The memory medium of claim 27,

wherein the process is a machine vision process executable to visually inspect a device;

wherein the block diagram is executable to determine an inspection classification for the device, depending on execution results of the process specification.

35. (Currently Amended) A system for specifying a computer-implemented process, the system comprising:

a processor;

a memory storing program instructions;

wherein the processor is operable to execute the program instructions to:

display a graphical user interface comprising a plurality of possible steps that are useable in specifying at least a portion of a process;

receive _first_ user input selecting a plurality of steps specifying a first portion of the process;

create a process specification in response to the _first_ user input, wherein the process specification comprises [[a]] _the_ plurality of steps specifying [[a]] _the_ first portion of the process;

receive second user input selecting a plurality of nodes and interconnecting at least two of the plurality of nodes, thereby specifying a plurality of interconnected nodes;

create a block diagram in response to _the second_ user input, wherein the block diagram specifies a second portion of the process;

wherein the block diagram comprises [[a]] _the_ plurality of interconnected nodes which visually indicate operation of the second portion of the process;

wherein the process specification is distinct from the block diagram;

wherein the process specification and the block diagram collectively specify the computer-implemented process.

36. (New) The method of claim 25,

wherein said receiving user input indicating operations to be performed on the object, comprises receiving first user input;

the method further comprising:

receiving second user input specifying a first plurality of nodes;

wherein said creating the block diagram comprises creating the block diagram from the script, second user input, including the first plurality of nodes, and automatically including a second plurality of nodes, wherein each node of the second plurality of nodes is associated with a step of the plurality of steps in the script;

37. (New) The method of claim 36, further comprising:

interconnecting at least one of the first plurality of nodes with at least one of the second plurality of nodes in response to third user input.

10